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Atty Docket No: 101259-1P US

In the Claims

This listing of claims will replace all prior versions and listings of claims in the application.

Listing of claims

 (currently amended) A compound of formula I, a pharmaceutically acceptable salt thereof, diastereomers, enantiomers, or mixtures thereof;

wherein

 R^1 and R^3 are, independently, selected from hydrogen, $C_{t+\delta}$ alkyl, and C_{3+6} cycloalkyl, wherein said $C_{1+\delta}$ alkyl and C_{3+6} cycloalkyl are optionally substituted with one or more groups selected from -R, -NO₂, -OR, -Cl, -Br, -I, -F, -CF₃, -C(=O)R, -C(=O)OH, -NH₂, -SH, -NHR, -NR₂, -SR, -SO₃H, -SO₂R, -S(=O)R, -CN, -OH, -C(=O)OR, -C(=O)NR₂, -NRC(=O)R, and -NRC(=O)OR, wherein R is, independently, a hydrogen or $C_{1+\delta}$ alkyl; and

 R^2 is selected from C_{1+} alkyl, C_{2+} alkenyl, C_{3+} 6cycloalkyl, and $\underline{or}(C_{3+}$ 6cycloalkyl- C_{1+} alkyl, wherein said C_{1+} 6alkenyl, C_{2+} 6lkenyl, C_{3+} 6cycloalkyl, and C_{3+} 6cycloalkyl- C_{1+} 4lkyl are optionally substituted with one or more groups selected from -R, -NO₂, -OR, -Cl, -Br, -I, -F, -CF₃, -C(=O)R, -C(=O)OH, -NH₂, -SH, -NHR, -NR₂, -SR, -SO₃H, -SO₂R, -S(=O)R, -CN, -OH, -C(=O)OR, -C(=O)NR₂, -NRC(=O)R, and -NRC(=O)-OR, wherein R is, independently, a hydrogen, C_{3+} 6cycloalkyl or C_{1+} 6alkyl.

2. (currently amended) A compound according to claim 1,

wherein R1 is C1-3alkyl;

R3 is hydrogen; and

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R² is selected from C₁₋₆alkyl and or C₃₋₆cycloalkyl-methyl, wherein said C₁₋₆alkyl and C₃₋₆cycloalkyl-methyl are optionally substituted with one or more groups selected from methoxy, ethoxy and isopropoxy.

3. (currently amended) A compound according to claim 1,

wherein R1 is selected from C1.3alkyl or and halogenated C1.3alkyl;

 R^3 is selected from hydrogen, $C_{1\text{-}8}$ alkyl, and $C_{2\text{-}6}$ cycloalkyl, wherein said $C_{1\text{-}8}$ alkyl and $C_{2\text{-}6}$ cycloalkyl are optionally substituted with one or more groups selected from $C_{1\text{-}8}$ alkyl, halogenated $C_{1\text{-}8}$ alkyl, -NO₂, -CF₃, $C_{1\text{-}8}$ alkoxy, chloro, fluoro, bromo, and iodo; and

 R^2 is selected from C_{1-6} alkyl, C_{3-6} cycloalkyl and <u>or</u> C_{3-6} cycloalkyl-methyl, wherein said C_{1-6} alkyl, C_{3-6} cycloalkyl and C_{3-6} cycloalkyl-methyl are optionally substituted with one or more groups selected from C_{1-6} alkyl, halogenated C_{1-6} alkyl, -CF $_3$, C_{1-6} alkoxy, chloro, fluoro and bromo.

4. (currently amended) A compound according to claim 1,

wherein R1 is selected from methyl or and ethyl;

R3 is hydrogen; and

R² is selected from n-propyl, cyclopropylmethyl, n-pentyl, 2-methoxyethyl, n-butyl, 2-isopropoxyethyl, 2-ethoxyethyl, 3-methoxypropyl, cyclobutylmethyl, methyl, and or_ethyl.

5. (currently amended) A compound according to claim 1, wherein the compound is selected from:

COMPOUND 1: methyl [3-[[4-[(diethylamino)carbonyl]phenyl](1-propyl-4-piperidinylidene)methyl]phenyl]carbamate;

COMPOUND 2: methyl [3-[[1-(cyclopropylmethyl)-4-piperidinylidene][4-

[(diethylamino)carbonyl]phenyl]methyl]phenyl]carbamate;

COMPOUND 3: methyl [3-[[4-[(diethylamino)carbonyl]phenyl](1-pentyl-4-

piperidinylidene)methyl]phenyl]carbamate;

COMPOUND 4: ethyl [3-[[4-[(diethylamino)carbonyl]phenyl](1-propyl-4-

piperidinylidene)methyl]phenyl]carbamate;

COMPOUND 5: ethyl [3-[[4-[(diethylamino)carbonyl]phenyl][1-(2-methoxyethyl)-4-

piperidinylidene]methyl]phenyl]carbamate;

COMPOUND 6: ethyl [3-[(1-butyl-4-piperidinylidene)[4-

[(diethylamino)carbonyl]phenyl]methyl]phenyl]carbamate;

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COMPOUND 7: [3-[[4-[(diethylamino)carbonyl]phenyl][1-[2-(1-methylethoxy)ethyl]-4-

piperidinylidenelmethyllphenyll- carbamic acid, methyl ester:

COMPOUND 8: [3-[[4-[(diethylamino)carbonyl]phenyl][1-(2-ethoxyethyl)-4-

piperidinylidene]methyl]phenyl]- carbamic acid, methyl ester;

COMPOUND 9: methyl 3-((1-butylpiperidin-4-ylidene){4-

[(diethylamino)carbonyl]phenyl}methyl)phenylcarbamate;

COMPOUND 10: methyl 3-{{4-[(diethylamino)carbonyl]phenyl}{1-(3-methoxypropyl)piperidin-4-vlidene]methyl}phenylcarbamate:

COMPOUND 11: methyl 3-([1-(cyclobutylmethyl)piperidin-4-ylidene]{4-

[(diethylamino)carbonyl]phenyl}methyl)phenylcarbamate;

COMPOUND 12: methyl 3-[{4-[(diethylamino)carbonyl]phenyl}(1-methylpiperidin-4ylidene)methyl]phenylcarbamate;

COMPOUND 13: methyl 3-[{4-[(diethylamino)carbonyl]phenyl}(1-ethylpiperidin-4vlidene)methyllphenylcarbamate;

COMPOUND 14: ethyl 3-([1-(cyclopropylmethyl)piperidin-4-ylidene]{4-

[(diethylamino)carbonyl]phenyl}methyl)phenylcarbamate:

COMPOUND 15: ethyl {3-[{4-[(diethylamino)carbonyl]phenyl}(1-methylpiperidin-4-

ylidene)methyl]phenyl}carbamate; COMPOUND 16: ethyl {3-[[4-(aminocarbonyl)phenyl](1-ethylpiperidin-4-

ylidene)methyl]phenyl}carbamate; and

COMPOUND 17: [3-[[4-[(diethylamino)carbonyl]phenyl][1-(2-methoxyethyl)-4-

piperidinylidenelmethyllphenyll- carbamic acid, methyl ester:

and pharmaceutically acceptable salts thereof.

Claims 6-7 (cancelled).

8. (currently amended) A pharmaceutical composition comprising a compound according to claims 1 and a pharmaceutically acceptable carrier.

9. (withdrawn) A method for the therapy of pain in a warm-blooded animal, comprising the step of administering to said animal in need of such therapy a therapeutically effective amount of a compound according to claims 1.

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10. (withdrawn) A method for the therapy of functional gastrointestinal disorders in a warmblooded animal, comprising the step of administering to said animal in need of such therapy a therapeutically effective amount of a compound according to claim 1.

11. (withdrawn) A process for preparing a compound of formula I, comprising:

reacting a compound of formula II with R2-X:

wherein X is halogen;

 R^1 and R^3 are, independently, selected from hydrogen, C_{1+6} alkyl, and C_{3+6} cycloalkyl, wherein said C_{1+6} alkyl and C_{3+6} cycloalkyl are optionally substituted with one or more groups selected from -R, -NO₂, -OR, -Cl, -Br, -I, -F, -CF₃, -C(=O)R, -C(=O)OH, -NH₂, -SH, -NHR, -NR₂, -SR, -SO₃H, -SO₂R, -S(=O)R, -CN, -OH, -C(=O)OR, -C(=O)NR₂, -NRC(=O)R, and -NRC(=O)OR, wherein R is, independently, a hydrogen or C_{1+6} alkyl; and

R² is selected from C₁₋₆alkyl, C₂₋₆alkenyl, C₃₋₆cycloalkyl, and C₃₋₆cycloalkyl-C₁₋₄alkyl, wherein said C₁₋₆alkyl, C₂₋₆alkenyl, C₃₋₆cycloalkyl, and C₃₋₆cycloalkyl-C₁₋₄alkyl are optionally

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substituted with one or more groups selected from -R, -NO $_2$, -OR, -CI, -Br, -I, -F, -CF $_3$, -C(=O)R, -C(=O)OH, -NH $_2$, -SH, -NHR, -NR $_2$, -SR, -SO $_3$ H, -SO $_2$ R, -S(=O)R, -CN, -OH, -C(=O)OR, -C(=O)NR $_2$, -NRC(=O)R, and -NRC(=O)-OR, wherein R is, independently, a hydrogen or C $_1$. $_6$ alkyl.

12. (withdrawn) A process for preparing a compound of formula III, comprising:

reacting a compound of formula II with R4-CHO:

wherein R^1 and R^3 are, independently, selected from hydrogen, $C_{1:6}$ alkyl, and $C_{3:6}$ cycloalkyl, wherein said $C_{1:6}$ alkyl and $C_{3:6}$ cycloalkyl are optionally substituted with one or more groups selected from -R, -NO₂, -OR, -Cl, -Br, -I, -F, -CF₃, -C(=O)R, -C(=O)OH, -NH₂, -SH, -NH_R, -NR₂, -SR, -SO₃H, -SO₂R, -S(=O)R, -CN, -OH, -C(=O)OR, -C(=O)NR₂, -NRC(=O)R, and -NRC(=O)-OR, wherein R is, independently, a hydrogen or $C_{1:6}$ alkyl; and

R⁴ is selected from C₁₋₆alkyl, C₂₋₆alkenyl, C₃₋₆cycloalkyl, and C₃₋₆cycloalkyl-C₁₋₄alkyl, wherein said C₁₋₆alkyl, C₂₋₆alkenyl, C₃₋₆cycloalkyl, and C₃₋₆cycloalkyl-C₁₋₄alkyl are optionally

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substituted with one or more groups selected from -R, -NO₂, -OR, -CI, -Br, -I, -F, -CF₃, -C(=O)R, -C(=O)OH, -NH₂, -SH, -NHR, -NR₂, -SR, -SO₃H, -SO₂R, -S(=O)R, -CN, -OH, -C(=O)OR, -C(=O)NR₂, -NRC(=O)R, and -NRC(=O)-OR, wherein R is, independently, a hydrogen or C₁.

13. (withdrawn) A process for preparing a compound of formula I, comprising:

reacting a compound of formula IV with R1O-C(=O)-X:

wherein X is halogen;

R¹ and R³ are, independently, selected from hydrogen, C₁₋₆alkyl, and C₃₋₆cycloalkyl, wherein said C₁₋₆alkyl and C₃₋₆cycloalkyl are optionally substituted with one or more groups selected from -R, -NO₂, -OR, -Cl, -Br, -I, -F, -CF₃, -C(=O)R, -C(=O)OH, -NH₂, -SH, -NHR, -NR₂, -SR, -SO₃H, -SO₂R, -S(=O)R, -CN, -OH, -C(=O)OR, -C(=O)NR₂, -NRC(=O)R, and -NRC(=O)-OR, wherein R is, independently, a hydrogen or C₁₋₆alkyl; and

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 R^2 is selected from $C_{1:6}$ alkyl, $C_{2:6}$ alkenyl, $C_{3:6}$ cycloalkyl, and $C_{3:6}$ cycloalkyl- $C_{1:4}$ alkyl, wherein said $C_{1:6}$ alkyl, $C_{2:6}$ alkenyl, $C_{3:6}$ cycloalkyl, and $C_{3:6}$ cycloalkyl- $C_{1:4}$ alkyl are optionally substituted with one or more groups selected from -R, -NO₂, -OR, -Cl, -Br, -I, -F, -CF₃, -C(=O)R, -C(=O)OH, -NH₂, -SH, -NHR, -NR₂, -SR, -SO₃H, -SO₂R, -S(=O)R, -CN, -OH, -C(=O)OR, -C(=O)NR₂, -NRC(=O)R, and -NRC(=O)-OR, wherein R is, independently, a hydrogen or $C_{1:6}$

Claims 14-16. (cancelled)

17. (currently amended) A compound <u>according to claim 1, wherein the compound is selected from:</u>

[3-[[4-[(diethylamino)carbonyl]phenyl][1-(2-ethoxyethyl)-4-piperidinylidene]methyl]phenyl]carbamic acid, methyl ester;

methyl 3-{{4-[(diethylamino)carbonyl]phenyl}[1-(3-methoxypropyl)piperidin-4-ylidene]methyl}phenylcarbamate; and

[3-[[4-[(diethylamino)carbonyl]phenyl][1-(2-methoxyethyl)-4-piperidinylidene]methyl]phenyl]-carbamic acid, methyl ester; and pharmaceutically acceptable salts thereof.

18. (currently amended) A compound of formula I or pharmaceutically acceptable salts thereof,

wherein R3 is hydrogen, R1 is selected from methyl or and ethyl; and R2 is C1.3alkoxy-C1.4alkyl.

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19. (withdrawn) A method for the therapy of anxiety in a warm-blooded animal, comprising the step of administering to said animal in need of such therapy a therapeutically effective amount of a compound according to claim 1.